

CAFROSBOOM – WAVE SLIM 2021_ user's manual

Cafrosbooms are designed and built with unidirectional prepreg carbon fiber to provide the utmost in immediacy of feedback to and from the sail rig.

Please read and come in terms with the instructions of use and the words of caution presented herewith. The few minutes that you spend caring for your boom will enhance the prospect of long lived joy in its company.

The three enemies of your boom are:

1. Improper assembly and disassembly of the tail piece
2. Improper storage or handling before and after sailing
3. Sand

The precautionary action required of you against the three enemies is summarized here:

CAUTION !!

- **STORE and KEEP the boom with the tail piece fitted in and the clips locked at ALL times!**
- **NEVER sail a boom with grip that is worn in the harness area!**
- **NEVER sail with sand on the tail tubes especially around the boom clips!**
- **NEVER sail with a loosely fitting boom clamp!**
- **NEVER remove the tail in any way other than the one suggested in the following instructions!**

Brief explanation of the necessity of the above caution message.

About storing, handling and assembly

Once the tail piece is removed or the clips are released, the boom parts become extremely vulnerable and require care while handling. If the boom arms are spread apart or twisted with the tail removed or the clips unlocked, damage may occur in the carbon structure and possibly lead to breakage in the future without warning.

About sand

Sand will at some point ingress in the critical clamp area, in the housings of the boom clips and under the webbing straps of the harness lines. If sand is left there, it will inevitably start eroding the carbon material. This will weaken the boom and may lead to breakage.

INSTRUCTIONS of DIS/ASSEMBLY

Removing the tail

1. Hold the boom upright - clamp against the ground and tail-end up.
2. Place your foot on the clamp to pin the boom securely to the ground.
3. Grab the boom tubes at clip height and pop the clip saddles open, one at time.
4. Maintain hold of the boom with just one hand while still pressing down with your foot.
5. Push the tail up with the free hand until you feel that it comes to a halt.
6. Place both your forearms along the outer side of the boom tubes in full contact from elbow to wrist.
7. With your forearms squeeze the boom tubes, **lightly** inwards, to release the friction and start "walking" the both tail tubes out with your fingers bit by bit.
8. As the tail tubes breaks loose, the boom arms will spring rapidly inwards, so be prepared, have a good hold of the boom and keep pressing with your foot at all times.
9. Now be very careful with the two boom parts as they are very vulnerable at this stage. Do what you have to do and put them back together.

Fitting the tail

1. Hold the boom body upright, tube ends up.
2. Place your foot on the clamp to pin the boom securely to the ground.
3. Hold the left boom arm with the left hand at clip height and the opposite tube end of the tail with the right hand.
4. With the assistance of you left hand, guide the left tail tube inside the left boom tube end - just barely: 1 or 2 mm.
5. Spread the boom tubes apart just as much as needed to align the right tail tube end with the entrance of the right boom tube and insert it again just barely: 1 to 2 mm.
6. Hold the inserted tail tubes secure with your fingers and place the inside of your forearms on the outer side of each boom tube and the base of your wrists on the outer side of the boom clips housings.
7. Use your fingers to 'walk' the tail tubes inside of the boom tubes, bit by bit while squeezing the boom tubes **lightly** inwards with your forearms and wrists to release the friction and facilitate the entry.
8. After the first few pin holes are in, friction eases and you may push the tail all the way with one swift draw.

CAUTION !

NEVER remove or install the tail of the boom in any other fashion than the one described above, with the boom securely held alone in an upright position and pressed firmly to the ground.

INSTRUCTIONS of MAINTENANCE against erosion by SAND

Sand in the clamp

Your boom comes with the clamp mounted and adjusted quite tight. It is almost impossible to swivel the clamp with just one hand. If, at some point in the future, the clamp develops a loose fit and/or you feel a 'grinding' effect, take it off and rinse the sand off the boom and the clamp parts. Then check for any WEAR on the carbon structure. You are advised to measure the diameter along the areas of highest visible wear, using a set of reliable calipers. If any of the readings is less than 33.5mm it is imperative that you schedule a refurbishment job for your boom. Consult with the builder on the ways to go about it.

Sand in the boom clips

To make boom life easy it is best not to perform boom length adjustments while the tail tubes or pin holes appear to be polluted with sand. If this is the case, dip the whole rig or the boom in the water to rid it of sand. Do NOT attempt to remove the tail from the boom while it is rigged.

After the session one may rinse sand off the boom while it is fully extended without having to take the tail off: rinse sand off the clips with plenty of water and slide the tail back and forth a few times. Once finished, remember to return the clips to the locked position. Forgetting the clips open may jeopardize their holding ability in time and may expose the pin saddle to unnecessary risk of breakage.

Sand under the straps of the harness lines

Cafrosbooms are equipped with solid rubber protection strips on the underside of the harness line area to minimize the risk of wear. In addition, cork grip features a special overcoat in that area to increase durability. Despite all this, you are advised to take some precautionary action every once in a while. Check the status of the boom grip in the harness line area. Rinse off sand and make sure that bare carbon is not exposed. If you see bare carbon make sure that you install protective material such as heat shrink tubing or wrap thin rubber sheet over the area for temporary relief and contact the builder for added hints.

GENERAL MAINTENANCE

Cork grip - Waxing

Handle your boom with care. Rig your sail on smooth surfaces, avoiding direct contact with concrete or sharp gravel. If you have to rig on such, place a board bag or a towel aground and let the boom rest on it. You must also wax your grip, every once in a while, to protect it and your hands from excessive abrasion. Waxing is to be carried out every 3-10 sessions by rubbing the wax-tab on your washed and fully dry boom with long strokes along and all around the tubes. Apply VERY light pressure aiming at leaving just a hazy trace of wax. Avoid working the wax in multiple passes over the same area as this may lead to an annoyingly gooey feel. If it happens, do not worry ... it will settle within the next few sessions.

Wax tabs come along with your boom in two grades, tailor-formulated for warm and cold weather. If you sense the boom going a bit slippery in the cold season switch to the appropriate grade.

Do NOT ever use a heat gun to melt the wax on cork grip.

Clip pin corrosion

The bronze clip pins eventually develop superficial corrosion which may hinder the opening of the clips especially after long periods of inactivity. A few opening and closing cycles will reestablish proper functionality. Do not use sandpaper to remove the corroded material from the pins as this may jeopardize the wobble free operation of the tail piece.

....most of the above are common sense... some are not. Bear in mind that carbon fiber is not really a material for applications of general utility. It merits us with tremendous gains in stiffness and low weight, yet, it is very unforgiving if mishandled or used in any other fashion than the one prescribed by the maker. Pay due respect and receive benefits.